



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,796	11/04/2003	Hongyong Zhang	07977-117003	3991
26171	7590	06/10/2005	EXAMINER	
FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			NGO, HUYEN LE	
		ART UNIT	PAPER NUMBER	
		2871		

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/699,796	ZHANG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Julie-Huyen L. Ngo	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 3/23/2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 17-42 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 17-42 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Specification***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter recited in the following claims. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

In claim 17, “*forming a third electrode over the substrate for forming a protective capacitor, wherein the third electrode surrounds the active matrix circuit region and the driver circuit region, and wherein the first through the third electrodes are electrically connected with each other; and electrically separating the third electrode from the first and the second electrodes.*”

In claim 21, “*forming a third electrode over the substrate, wherein the third electrode surrounds the active matrix circuit region and the driver circuit region, wherein the first through the third electrodes are on a same layer, and wherein the first through the third electrodes are electrically connected with each other; and electrically separating the third electrode from the first and the second electrodes.*”

In claim 25, “*forming a third electrode over the substrate, wherein the third electrode surrounds the active matrix circuit region and the driver circuit region, wherein the third electrode has a larger width than that of the first and the second electrodes, and wherein the first through the third electrodes are electrically connected with each other; and electrically separating the third electrode from the first and the second electrodes.*”

In claim 29, “*wherein the first through the third electrodes are electrically connected with each other; and electrically separating the third electrode from the first and the second electrodes.*”

In claim 31, “*forming a third electrode over the substrate for forming a protective capacitor, wherein the third electrode is located outside the active matrix circuit region and the driver circuit region, wherein the third electrode has a larger width than that of the first and the second electrodes, and wherein the first through the third electrodes are electrically connected with each other; and electrically separating the third electrode from the first and the second electrodes.*”

In claim 33, “*wherein the first through the third electrodes comprise aluminum and are electrically connected with each other; and electrically separating the third electrode from the first and the second electrodes.*”

In claim 37, “*electrically separating the second conductive layer from the two first conductive layers, wherein the second conductive layer forms a protective capacitor using the second conductive layer as an electrode.*”

In claim 41, “*wherein the protective capacitor comprises another electrode which comprises a semiconductor layer.*”

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 17 to 42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In claim 17, 25, 29, 31, 33 and 35, the step of "*wherein the first through the third electrodes are electrically connected with each other; electrically separating the third electrode from the first and the second electrodes*" is incomplete and unclear of how the electrodes are electrically connected to each other and than electrically separating from each other.

In claim 17, the step of "*forming a third electrode over the substrate for forming a protective capacitor, wherein the third electrode surrounds the active matrix circuit region and the driver circuit region, and wherein the first through the third electrodes are electrically connected with each other*"; are unclear of how a third electrode, i.e., ONE electrode can form a *protective capacitor*, and be formed to surrounds the active matrix circuit region and the driver circuit region?

Similar problems as in claim 17 exist in claims 21 and 25.

In claims 31 and 35, the step of "*forming a third electrode over the substrate for forming a protective capacitor,*" is unclear of how a third electrode, i.e., ONE electrode can form a *protective capacitor?*

Claim 37 is incomplete and unclear of how the second conductive layer forms *a protective capacitor*. Also it is unclear of how the second conductive layer is electrically

connected to the two first conductive layers and electrically separating from the two first conductive layers.

In claim 41, the recitation calling for "*wherein the protective capacitor comprises another electrode which comprises a semiconductor layer,*" is unclear and incomplete of how and where *the another electrode* is formed in reference to the other electrodes/conductive layers.

All claims that are depended from the above-rejected claims and are not specifically discussed above are rejected as bearing the defects of the claims from which they depend.

Appropriate correction is required.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Julie-Huyen L. Ngo whose telephone number is (571) 272-2295. The Examiner can normally be reached on T-Friday.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. Robert H. Kim can be reached at (571) 272-2293.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1562.

May 31, 2005

  
**Julie -Huyen L. Ngo**  
Primary Examiner  
Art Unit 2871